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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,538	12/19/2005	Takashi Fujita	053362	9367

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EXAMINER	
XU, XIAOYUN	

ART UNIT	PAPER NUMBER
1797	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/561,538	FUJITA ET AL.	
	Examiner	Art Unit	
	ROBERT XU	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) *8-13, 15, 18 and 19* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,14,16 and 17* is/are rejected.

7)☒ Claim(s) *2 and 3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/7/2006, 12/19/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, Claims 1-7, 14, 16 and 17 in the reply filed on 12/17/2008 is acknowledged. The traversal is on the ground(s) that the result of the present invention is unexpectedly superior from the disclosure of McCaffrey. This is not found persuasive because the Table 4 of the presence invention only comparing the effect of grounding the instrument with lining anti-static tape inside the measurement chamber. Grounding the instrument to the ground is not the all teaching of McCaffrey. McCaffrey teaches a mechanism for preventing an electric charge in an atmosphere in a photometry chamber from transferring to the surface of the sample by lining the inside of the chamber with conducting material (see paragraph [0015]). Therefore, the present invention of lining anti-static tape inside the chamber is an obvious variation of the mechanism taught by McCaffrey. The requirement is still deemed proper and is therefore made FINAL. And Group II, Claims 8-13, 15, 18 and 19 are withdrawn from consideration.

In response to the first species restriction, applicants elect species (1) a mechanism for covering the surface of solution with liquid which is insoluble in the solution and spread over surface of the solution.

In response to the second species restriction, applicants elect species (3) a material having a static electricity elimination effect.

Claim Objections

2. Claims 2 and 3 are objected to under 37 CFR 1.75©, as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 2 and 3 do not recited any further steps to the method of Claim 1.

Claim Rejections – 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 3-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to Claim 1, Claim 1 recites "objective component". The "objective component" is not a clearly defined term in the specification. The examiner suggests using "optically detectable biological compound" or "optically detectable compound" to replace "objective component".

In regard to Claims 3 and 5, no specific method steps are recited in the claims. It is also not clear, as to how the elements of the Markush group are being used in the method recited in the claims, since the elements are different in their nature.

In regard to Claim 4, Claim 4 is not clear. The examiner suggests an alternative language: "The method according to Claim 2, wherein the method for … electrically constant [is a method for] comprises attaching a material … chamber".

In regard to Claim 6, Claim 6 is not clear. The examiner suggests an alternative language: "The method according to Claim 2, wherein the method for … reaction vessel [is a method for] comprises shutting an opening … solution".

Claim Rejections – 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-5, 7 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCaffrey et al. (US 2001/0038450) (McCaffrey) in view of Ryoji (Engineering Materials, 1999).

In regard to Claims 1, 7, 14 and 15, McCaffrey teaches determining amount of ATP by detecting ATP-luciferase chemi-luminescence (see paragraph [0004]). McCaffrey teaches that the photo-detecting transducers used for detecting luminescence are very sensitive to static charge; for instance, static charges seen when a sample consumable is inserted into the sample chamber (compartment) (see col. 2, paragraph [0015]). McCaffrey further teaches that conventionally, a sample chamber (compartment) of known devices must be made of a conductive material or some other means must be provide to remove static charge from the sample chamber (see paragraph [0015]). McCaffrey does not specifically teach what “some other means” are.

Ryoji teaches prevention of product troubles by static electricity failure, static electricity removal and static elimination materials (see title). At time of the invention, it would have been obvious to ordinary skill in the art to use static elimination materials to remove static electricity in the air as taught by Ryoji before the air enters McCaffrey’s sample chamber, because McCaffrey teaches the detecting luminescence are very sensitive to static charge and other means must be provide to remove the static charges.

In regard to Claims 2-5 and 16, Ryoji teaches prevention of product troubles by static electricity failure, removal of static electricity by using materials having a static elimination effect (see abstract). At time of the invention, it would have been obvious to one of ordinary skill in the art to remove static electricity by materials having a static

elimination effect as taught by Ryoji in McCaffrey's measurement chamber so that the static inside the chamber can be removed.

8. **Claims 6 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over McCaffrey in view of Ryoji as applied to Claims 1-5, 7, 14 and 16 above, and further in view of Rapp et al. (US Patent 6,602,464) (Rapp).

In regard to Claims 6 and 17, McCaffrey does not teach shutting an opening apart of the reaction vessel with a sheet or a method for covering the surface of the solution in the reaction vessel with a substance insoluble to the solution. Oil layer has been used to seal the surface of aqueous solution in the art, because oil is insoluble to water and oil is lighter than water. For example, Rapp teaches using oil layer to seal the surface of surface of liquid animal waste (see Col. 2, lines 33-39). At time of the invention it would have been obvious to ordinary skill in the art to use oil layer to seal the surface of solution in the reaction vessel as taught by Rapp, in order to prevent the electrostatic charge from interfering with the measurement, because McCaffrey teaches that some other means must be provide to remove static charge from the sample chamber (see paragraph [0015]). Sealing an opening part of the reaction vessel with a sheet to prevent the solution in side the vessel from contacting outside is well known in the art. At the time of the invention it would have been obvious to ordinary skill in the art to seal the opening of the vessel with sheet in order to prevent the solution inside the vessel from contacting the static charge as taught by McCaffrey and art.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Martin et al. (US Patent 6,290,868) (Martin) teaches static elimination materials comprising a particulate conducting phase dispersed in a non-conducting medium have long used such dispersions to provide conductivity to conventionally non-conducting elements (see Col.1, lines 21-27).

Castranova et al. (Environmental Health Perspectives, 1997) (Castranova) teaches using a machine (Static Control Service Model PFC-20) to neutralize static charge in the air before fluorescence detection (see Inhalation Exposure).

Smith (US Patent 5,898,559) discloses an apparatus and method for neutralizing electrostatic charge in non-conductive pipe.

Hitachi (JP 06-018968U, 1994, IDS) discloses an automatic analysis device with a photometer that measures optics by reaction liquid and equipped with a static electricity removing device that removes static electricity from the reaction chamber.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT XU whose telephone number is (571)270-5560. The examiner can normally be reached on Mon-Thur 7:30am-5:00pm, Fri 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

2/6/2009

/Yelena G. Gakh/
Primary Examiner, Art Unit 1797

RX